SCREENING: All adult inpatient cases (≥18 years) admitted to a hospital who have been treated with respiratory support (NIV/CPAP/HFNO) in any setting other than critical care AND/OR admitted to Respiratory Support Units.

1	**Demographics**
1.1	**Gender:** □ Male □ Female □ Other □ Prefer not to say
1.2	**Age:** _____
1.3	**Ethnicity:** □ White (English, Welsh, Scottish, Northern Irish, or British) □ White Irish □ White Gypsy or traveller □ Any other White background □ Mixed ethnicity □ Asian or Asian British □ Black, African, Caribbean or Black British □ Any other ethnic group
1.4	**Date of arrival to Hospital (ED, ward, clinic):** DD/MM/YYYY
1.5	**Time of arrival to Hospital (ED, ward, clinic):** _ _:_ _ (24HR)
1.6	**This audit includes all patients requiring a higher level of monitoring and respiratory intervention than would be expected for a routine ward environment. Which option most accurately describes the ward area where the patient received MOST of their respiratory support / complex respiratory management during this admission:** □ Designated Respiratory Support Unit (RSU) □ Respiratory ward area that routinely provides NIV and has SOME enhanced staffing, though not fully meeting BTS/ICS RSU criteria □ Respiratory ward area, no enhanced staffing for NIV (1 nurse:4 or more patients) □ High Dependency Unit □ Acute Medical Unit □ ED □ General Medical or other ward area
1.7	**Date of arrival to the ward area specified in 1.6 :** DD/MM/YYYY
1.8	**Time of arrival:** _ _:_ _ (24HR)
1.9	**Was there any delay in starting acute NIV?** □ Yes □ No □ Unknown
1.10	**Length of RSU stay/duration of enhanced respiratory care:** Days (allow freetext numbers)

1.11	**Discharge location from RSU:** □ Step-down to ward □ Escalation to ICU/HDU □ Transfer to another hospital □ Discharge to home/community setting □ Other □ Deceased □ Unknown
1.12	**Was there a significant delay in transferring the patient out of RSU?** □ Yes □ No □ Don't know
1.13	**Date of discharge from hospital (or date of death if deceased):** DD/MM/YYYY
1.14	**Status at discharge from hospital:** □ Alive □ Deceased
1.15	**Escalation status during FIRST 24 hours of starting respiratory support OR following RSU admission:** □ For escalation to critical care □ Not For escalation to critical care □ Unknown
1.16	**Please record the patient's Rockwell frailty score prior to admission:** □ 1 – Very fit □ 2 - Well □ 3 – Managing well □ 4 - Vulnerable □ 5 – Mildly frail □ 6 – Moderately frail □ 7 – Severely frail □ 8 – Very severely frail □ 9 – Terminally ill □ unknown
1.17	**Infection status on starting respiratory support or admission to respiratory support unit (whichever was soonest):** □ Suspected or known COVID-19 positive □ COVID-19 negative □ Suspected or known Flu/RSV positive □ Flu/RSV negative
2	**Diagnostic categories and use of respiratory support**
2.1	**Types of respiratory support used during RSU admission (tick all that apply please):** □ Controlled oxygen (via Venturi) □ Oxygen via nasal cannula or other standard non-Venturi mask (up to 15L/min) □ HFNO □ CPAP □ NIV □ NA / not admitted to an RSU
2.2	**Primary diagnostic category** □ Hypercapnic respiratory failure AND treated with NIV *(If yes, please go to Section 3)* *If yes to the above, was the primary diagnostic category:* □ Acute acidaemic hypercapnic respiratory failure, treated with acute NIV

	□ Compensated (non-acidaemic) hypercapnic respiratory failure treated with NIV (acute NIV or home initiation) or on home NIV already, treated with acute NIV (please specify) □ Acute hypoxaemic respiratory failure due to known or suspected COVID-19 *(If yes, please got to Section 5)* □ Acute asthma □ Acute pneumonia □ Acute pulmonary embolism □ Complex pleural management (fluid or pneumothorax) □ Acute exacerbation of Interstitial lung disease □ Neuromuscular / secretion clearance (NOT TREATED WITH ACUTE NIV) □ Acute exacerbation of COPD (NOT TREATED WITH ACUTE NIV) □ Other respiratory indication for RSU admission (please specify) □ Non-respiratory reason for RSU admission (e.g. hospital overflow issues) (please specify)
3	**Complete only for NIV pathway patients**
3.1	**Primary indication for NIV:** □ COPD (suspected or known) *(If yes, please got to Section 4)* □ Obesity Hypoventilation □ Chest wall/neuromuscular □ Acute Cardiac decompensation (e.g. pulmonary oedema/heart failure) □ Acute Pneumonia (in absence of COPD or other known respiratory comorbidity) □ No data/not recorded □ Other
3.2	**Where did NIV start:** □ ED / MAU (designated NIV area) □ RSU (designated NIV area) □ Other designated ward NIV area □ ICU/HDU □ Area not formally designated to deliver NIV □ Unknown □ Other
3.3	**Date of NIV start:** DD/MM/YYYY
3.4	**Time of NIV start:** _ _:_ _ (24HR)
3.5	**Type of pre-NIV blood gas measurement:** □ Arterial □ Venous □ Capillary □ Unknown
3.6	**Pre-NIV Ph:** _____
3.7	**Pre-NIV PaO2:** _____
3.8	**Pre-NIV PaCO2:** _____
3.9	**Date of pre-NIV blood gas:** DD/MM/YYYY
3.10	**Time of pre-NIV blood gas:** _ _:_ _ (24HR)

3.11	**Highest IPAP pressure reached at 2-4 hours:** _____
3.12	**Highest EPAP pressure reached at 2-4 hours:** _____
3.13	**Ventilator Back-up rate at 2-4 hours** _____
3.14	**Was a blood gas obtained after starting NIV:** □ Yes □ No (if no, go to question 3.20) □ Unknown
3.15	**If YES, date of first blood gas after starting NIV:** DD/MM/YYYY
3.16	**Time of first blood gas after starting NIV:** _ _:_ _ (24HR)
3.17	**Type of blood gas measurement:** □ Arterial □ Venous □ Capillary □ Unknown
3.18	**Post-NIV Ph:** _____
3.19	**Post-NIV PaO2:** _____
3.20	**Post-NIV PaCO2:** _____
3.21	**Was correction of acidaemia (to pH 7.35 or higher) achieved with NIV?** □ Yes □ No □ Don't know
3.22	**If yes, how long did this take (hours):** _____
3.23	**Outcome of NIV:** □ Success (clinical improvement and pH >7.35) □ Success (clinical improvement, no blood gas confirmation) □ Failure □ Unknown/no data
3.24	**Duration of NIV treatment** _____ (days)
3.25	**If NIV failed, was the patient referred to Critical Care:** □ Yes and transferred to Critical Care

	□ Yes, assessed by Critical Care and not escalated □ No, documented not for escalation to Critical Care □ Unknown/not documented
3.26	**If NIV failed, was the patient intubated:** □ Yes □ No □ Unknown
3.27	**Outcome of admission:** □ Discharged from hospital off NIV (local clinic follow up to include blood gas < 4 weeks post-discharge) □ Discharged from hospital off NIV (referred to home ventilation service) □ Discharged from hospital off NIV (clinic follow up organised) □ Discharged from hospital off NIV (no respiratory follow up) □ Discharged from hospital on NIV (pre-existing home NIV user) □ Discharged from hospital on NIV (new home NIV started this admission, or transferred as inpatient to home ventilation service) □ Death □ Unknown/no data
3.28	**Was a blood gas obtained before hospital discharge after stopping NIV:** □ Yes □ No (if no, go to section 4) □ Unknown
3.29	**Type of blood gas measurement:** □ Arterial □ Venous □ Capillary □ Unknown
3.30	**Post-NIV Ph:** _____
3.31	**Post-NIV PaO2:** _____
3.32	**Post-NIV PaCO2:** _____
4	**NIVO SCORE (for all NIV patients)**
4.1	**CXR consolidation at the time of decision to start NIV:** □ Yes □ No
4.2	**Glasgow Coma Scale ≤14 pre-NIV:** □ Yes □ No
4.3	**Persistent, new or paroxysmal Atrial Fibrillation prior to the decision to start NIV:** □ Yes □ No
4.4	**pH <7.25 on pre-NIV blood gas:** □ Yes □ No
4.5	**Time to from hospital arrival to recognition of Acidaemia >12 hours:** □ Yes

	□ No
4.6	**eMRCD: Which of the following statements best describes the patient's level of breathlessness when feeling at their best during the last 3 months:** □ Too breathless to leave the house unassisted* and requires assistance in washing AND dressing □ Too breathless to leave the house unassisted* but independent in washing and/or dressing □ Any level of breathlessness that is less severe than the above options ** Simple walking aids do not count as assistance, but mobility scooters, wheelchairs etc do*.
5	**COVID-19 Pathway**
5.1	**Date of COVID-19 symptom onset:** DD/MM/YYYY
5.2	**Confirmed COVID-19 positive?** □ Yes □ No
5.3	**If YES, date of positive test:** DD/MM/YYYY
5.4	**Which of the following pre-existing co-morbidities did the patient have?** □ Respiratory □ Cardiac □ Obesity □ Type 2 diabetes mellitus □ Hypertension □ None □ Unknown
5.5	**Oxygen requirement just before starting respiratory support:** _____%
5.6	**Oxygen saturation just before starting respiratory support :** _____%
5.7	**Respiratory rate just before starting respiratory support:** _____
5.8	**What non-invasive respiratory support did the patient receive? (tick all that apply)** □Treated with CPAP □Treated with HFNO □Treated with NIV □ Not applicable
5.9	**If yes to any of the above, what was the primary mode of non-invasive respiratory support:** □ CPAP □ HFNO □ NIV
5.10	**Total duration of non-invasive respiratory support (CPAP/HFNO/NIV) :** _____Days
5.11	**Complications during treatment with CPAP/HFNO/NIV: (tick all that apply)** □ Pneumothorax □ Pneumomediastinum □ Pulmonary embolism □ No complications

	□ Other (please specify)
5.12	**Outcome of CPAP/HFNO/NIV:** □ Success, weaned to oxygen alone/weaned from oxygen completely □ Failure, but proceeded to intubation □ Failure, did not proceed to intubation
5.13	**Reason for RSU discharge (if admitted to RSU):** □ Step-down to ward for continued active medical treatment □ Transfer to Critical Care □ Transfer to external acute trust (RSU/Critical Care transfer) □ Transfer to Palliative Care / ward setting with palliative intent □ Planned discharge to home/community setting □ Self discharge □ Deceased □ Unknown □ Other (please specify)
5.14	**If transferred to Critical care, was the patient intubated during their critical care admission?** □ Yes □ No □ Unknown